CERES SCF STATUS

Description	May 05, 2004 Status	Problems
SUN Upgrades	No new updates.	
SGI Upgrades	No new updates.	
Thunder, Lightning & Lanina	This past reporting period preliminary testing of Network Address Translation (NAT) was tested on *lanina* between the CERES IRIX 6.5.22m testbed and LaRCnet. This is being accomplished to accommodate license issues related to NAG fortran 95 as well as OS updating of systems on the backend network. This preliminary testing identified problems and some unanticipated results. All work has stopped on this activity until the System Administration team can resolve some of the identified problems. The summary of the schedule for testing on the CERES IRIX 6.5.22m with the MIPSpro 7.4 compilers is shown below. The System Administration team needs each subsystem to identify a time that is convenient for them to schedule testing. 1.) Inversion (April 13th thru April 15th) Sandy requested the testing time of April 13th thru April 15th. Last week Scott Zentz requested additional time. The testbed system was not in use at that time, so Scott was given the go ahead to use it. 2.) Instrument (Week of 4/19 thru 4/23) Completed. Denise has completed the testing of the Instrument subsystem. No problems were reported. 3.) Clouds (Ongoing) Walt is in the progress of testing his subsystem. He is currently working intermittently on the testbed system as time allows. He has reported some cloud code problems but nothing that can't be overcome at this time. 4.) SARB (TBD) On April 22 Lisa requested time on the testbed system (5 days to test the SARB subsystem). It is requested she supply a block of time that is convenient to her schedule for testing. 5.) GGEO Joe compiled CERESlib on the testbed system but has not requested time to test the GGEO code. He may be waiting for access to the NAG 95 compiler. 6.) TISA (TDB) On hold until the license issue can be resolved with NAG 95.	

Description	May 05, 2004 Status	Problems
Thunder, Lightning & Lanina (cont'd)	7.) ERBELIKE (TBD) No response for request of time on the testbed system at this time. The archive tool was completed this past reporting period and a subset of testbed users evaluated it. The comments returned by this subset of testbed users will be incorporated into the archive tool. At this time we are still waiting for the arrival of the hardware to support this tool. Analysis of the TISA CER9.2P1 PGE was preformed this past reporting period. The analysis identified a large amount of disk and buffer activity. *Lanina* was placed into a wait I/O state when more the 12 concurrent jobs were run. The limiting factors identified by the sar data were the I/O transfer rate of the fiber channel connection to the RAID along with the number of LUN's stripped to create the partition. Buffer transfers between disk and memory were monitored and found to be in the range of 8,000,000 transfers a second. *Lanina's* tuning was found to be adequate to have buffer transfers at this rate.	
Security	A ICMP bombardment was identified this past month from the NON-CERES system *fleet.larc.nasa.gov*. This was promptly reported to Network Security as a possible configuration issue with *fleet.larc.nasa.gov*. After a 24 hour period, this bombardment of ICMP timestamp reply packets ceased. This bombardment of ICMP packets was not to the level to cause a DOS environment but did put a heavy load on the GigE network. Approximately 12,500 packets per hour per CERES system were experienced. The offsite PCs have been patched with the latest Microsoft security patches, including patches for MS04-011 LSASS vulnerability.	
Network	The ATM link between SAIC and LARC has been upgraded from 50Mb to 100Mb full duplex. The new 100Mb circuit provides increased bandwidth at a lower cost.	

Description	May 05, 2004 Status	Problems
Toolkit	No new updates. Prior info: Software Version -------------- ------------- HDF-EOS 2.9v1.00 HDF-EOS 5.1.5 HDF 4.1r5 HDF 5-1.4.4 SDPTK 5.2.9v1.00 BRAND COMPILER ABI ISA ----------- ---------------- ----- -------- sgi f95 (NAG) 64 mips4 sgi32 f90 (SGI) n32 mips3 sgi64 f90 (SGI) 64 mips4	
DMSS Transfer	No new updates.	

CERES SCF/DAAC Server Information

Server Name:	Asdsun	Thunder	Lightning	Lanina	Samantha[1]	Warlock	Darrin
System Type	Sun Fire V880	Origin 3800	Origin 3800	Origin 3800	Origin 2000	Origin 3800	Origin 2000
Operating System	Solaris 8	IRIX64 6.5.16m	IRIX64 6.5.16m	IRIX64 6.5.16m	IRIX64 6.5.18m	IRIX64 6.5.17m	IRIX64 6.5.18m
Fortran compilers	SUNWspro 4.0	7.3.1.3m	7.3.1.3m	7.3.1.3m	7.3.1.3m	7.3.1.3m	7.3.1.3m
Toolkit (default)	TK5.2.7v1	TK5.2.7v1	TK5.2.7v1	TK5.2.7v1		TK5.2.7v1	
Toolkit (other)		TK5.2.9v1	TK5.2.9v1	TK5.2.9v1		TK5.2.9v1	
Ada	N/A	1.3	1.3	1.3		1.3	1.3
IDL	5.6	5.5	5.5	5.5	5.5 (demo mode)	5.5	5.3
NAG fortran 95	1.0(439)	1.0(428)	1.0(428)	1.0(428)	Removed	1.0(428)	1.0(428)
HDF	4.1.r3	4.1.r3	4.1.r3	4.1.r3		4.1.r3	
Proposed upgrades	None	None	None	None	None	None	
Problems	None	None	None	None	None	None	None

1. New *samantha* (previously *trance*).

NOTES:

Currently the SCF is not able to backup all data stored on the SCF servers. On the SCF SGI servers: *thunder, lightning* and *lanina* the partitions ending with an "-" followed by a numeric number are currently being backed up on a regular schedule. The partitions ending with an "-" followed by an alpha character are considered scratch space and are not being backed up. Any data stored on these non-backed up partitions should be considered recoverable or reproducible from other sources.

Systems *warlock* and *samantha2* were merged into one system (*warlock*) on Tuesday, August 19.

All CERES processing was transitioned to *warlock*.

Date last updated (server info chart only): 05/05/04

Monday, May 3, 2004